



1600

## RAW SEQUENCE LISTING

DATE: 01/28/2004

PATENT APPLICATION: US/09/202,104B

TIME: 13:44:21

Input Set : A:\sequence listv2.ST25.txt

Output Set: N:\CRF4\01282004\I202104B.raw

3 <110> APPLICANT: van Leengoed, Leonardus Adrianus Maria Govardus  
 4 Hoebe, Kasper Hubertus Nicolaas  
 5 Meloen, Robert Hans  
 7 <120> TITLE OF INVENTION: IL-6 and IL-6 receptor derived peptide having IL-6  
 antagonistic  
 8 or agonistic activity  
 10 <130> FILE REFERENCE: 2183-3890US  
 12 <140> CURRENT APPLICATION NUMBER: US 09/202,104B  
 13 <141> CURRENT FILING DATE: 1999-04-30  
 15 <150> PRIOR APPLICATION NUMBER: EP 96201720.8  
 16 <151> PRIOR FILING DATE: 1996-06-20  
 18 <150> PRIOR APPLICATION NUMBER: PCT/NL97/00345  
 19 <151> PRIOR FILING DATE: 1997-06-19  
 21 <160> NUMBER OF SEQ ID NOS: 19  
 23 <170> SOFTWARE: PatentIn version 3.2  
 25 <210> SEQ ID NO: 1  
 26 <211> LENGTH: 12  
 27 <212> TYPE: PRT  
 28 <213> ORGANISM: Artificial Sequence  
 30 <220> FEATURE:  
 31 <223> OTHER INFORMATION: region in IL-6  
 33 <400> SEQUENCE: 1  
 35 Arg Tyr Ile Leu Asp Gly Ile Ser Ala Leu Arg Lys  
 36 1 5 10  
 39 <210> SEQ ID NO: 2  
 40 <211> LENGTH: 16  
 41 <212> TYPE: PRT  
 42 <213> ORGANISM: Artificial Sequence  
 44 <220> FEATURE:  
 45 <223> OTHER INFORMATION: region in IL-6  
 47 <400> SEQUENCE: 2  
 49 Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys Ala Lys Asn Leu  
 50 1 5 10 15  
 53 <210> SEQ ID NO: 3  
 54 <211> LENGTH: 19  
 55 <212> TYPE: PRT  
 56 <213> ORGANISM: Artificial Sequence  
 58 <220> FEATURE:  
 59 <223> OTHER INFORMATION: region in IL-6  
 61 <400> SEQUENCE: 3  
 63 Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser Leu Arg Ala Leu  
 64 1 5 10 15  
 67 Arg Gln Met  
 71 <210> SEQ ID NO: 4

## RAW SEQUENCE LISTING

DATE: 01/28/2004

PATENT APPLICATION: US/09/202,104B

TIME: 13:44:21

Input Set : A:\sequence listv2.ST25.txt

Output Set: N:\CRF4\01282004\I202104B.raw

```

72 <211> LENGTH: 15
73 <212> TYPE: PRT
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: region of receptor alpha-chain of IL-6
79 <400> SEQUENCE: 4
81 Gln Leu Ser Cys Phe Arg Lys Ser Pro Leu Ser Asn Val Val Cys
82 1          5          10          15
85 <210> SEQ ID NO: 5
86 <211> LENGTH: 21
87 <212> TYPE: PRT
88 <213> ORGANISM: Artificial Sequence
90 <220> FEATURE:
91 <223> OTHER INFORMATION: region of receptor alpha-chain of IL-6
93 <400> SEQUENCE: 5
95 Pro Arg Ser Thr Pro Ser Leu Thr Thr Lys Ala Val Leu Leu Val Arg
96 1          5          10          15
99 Lys Phe Gln Asn Ser
100          20
103 <210> SEQ ID NO: 6
104 <211> LENGTH: 20
105 <212> TYPE: PRT
106 <213> ORGANISM: Artificial Sequence
108 <220> FEATURE:
109 <223> OTHER INFORMATION: region of receptor alpha-chain of IL-6
111 <400> SEQUENCE: 6
113 Met Cys Val Ala Ser Ser Val Gly Ser Lys Phe Ser Lys Thr Gln Thr
114 1          5          10          15
117 Phe Gln Gly Cys
118          20
121 <210> SEQ ID NO: 7
122 <211> LENGTH: 25
123 <212> TYPE: PRT
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: region of receptor beta-chain of IL-6
129 <400> SEQUENCE: 7
131 Pro Glu Lys Pro Lys Asn Leu Ser Cys Ile Val Asn Glu Gly Lys Lys
132 1          5          10          15
135 Met Arg Cys Glu Trp Asp Gly Gly Arg
136          20          25
139 <210> SEQ ID NO: 8
140 <211> LENGTH: 25
141 <212> TYPE: PRT
142 <213> ORGANISM: Artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: region of receptor beta-chain of IL-6
147 <400> SEQUENCE: 8
149 Asn Phe Thr Leu Lys Ser Glu Trp Ala Thr His Lys Phe Ala Asp Cys

```

## RAW SEQUENCE LISTING

DATE: 01/28/2004

PATENT APPLICATION: US/09/202,104B

TIME: 13:44:21

Input Set : A:\sequence listv2.ST25.txt

Output Set: N:\CRF4\01282004\I202104B.raw

```

150 1          5          10          15
153 Lys Ala Lys Arg Asp Thr Pro Thr Ser
154          20          25
157 <210> SEQ ID NO: 9
158 <211> LENGTH: 15
159 <212> TYPE: PRT
160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: region of receptor beta-chain of IL-6
165 <400> SEQUENCE: 9
167 Trp Val Glu Ala Glu Asn Ala Leu Gly Lys Val Thr Ser Asp His
168 1          5          10          15
171 <210> SEQ ID NO: 10
172 <211> LENGTH: 17
173 <212> TYPE: PRT
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: region of receptor beta-chain of IL-6
179 <400> SEQUENCE: 10
181 Pro Val Tyr Lys Val Lys Pro Asn Pro Pro His Asn Leu Ser Val Ile
182 1          5          10          15
185 Asn
189 <210> SEQ ID NO: 11
190 <211> LENGTH: 28
191 <212> TYPE: PRT
192 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:
195 <223> OTHER INFORMATION: region of receptor alpha-chain of IL-6
197 <400> SEQUENCE: 11
199 Glu Trp Gly Pro Arg Ser Thr Pro Ser Leu Thr Thr Lys Ala Val Leu
200 1          5          10          15
203 Leu Val Arg Lys Phe Gln Asn Ser Pro Ala Glu Asp
204          20          25
207 <210> SEQ ID NO: 12
208 <211> LENGTH: 187
209 <212> TYPE: PRT
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: human IL-6 peptide
215 <400> SEQUENCE: 12
217 Ala Pro Pro Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro
218 1          5          10          15
221 His Arg Gln Pro Leu Thr Ser Ser Glu Arg Ile Ser Lys Gln Ile Arg
222          20          25          30
225 Tyr Ile Leu Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys
226          35          40          45
229 Ser Asn Met Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu
230          50          55          60
233 Asn Leu Pro Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe

```

## RAW SEQUENCE LISTING

DATE: 01/28/2004

PATENT APPLICATION: US/09/202,104B

TIME: 13:44:21

Input Set : A:\sequence listv2.ST25.txt

Output Set: N:\CRF4\01282004\I202104B.raw

```

234 65          70          75          80
237 Asn Glu Glu Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe
238          85          90          95
241 Glu Val Tyr Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu
242          100          105          110
245 Gln Ala Arg Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu
246          115          120          125
249 Gln Lys Lys Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr
250          130          135          140
253 Thr Asn Ala Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu
254 145          150          155          160
257 Gln Asp Met Thr Thr His Leu Ile Leu Ile Arg Ser Phe Lys Glu Phe
258          165          170          175
261 Leu Gln Ser Ser Leu Arg Ala Leu Arg Gln Met
262          180          185

```

265 &lt;210&gt; SEQ ID NO: 13

266 &lt;211&gt; LENGTH: 112

267 &lt;212&gt; TYPE: PRT

268 &lt;213&gt; ORGANISM: Artificial Sequence

270 &lt;220&gt; FEATURE:

271 &lt;223&gt; OTHER INFORMATION: receptor alpha-chain of IL-6

274 &lt;220&gt; FEATURE:

W--&gt; 275 &lt;221&gt; NAME/KEY: Xaa

276 &lt;222&gt; LOCATION: (60)..(65)

277 &lt;223&gt; OTHER INFORMATION: Xaa on pos. 60 and 65 is unknown

279 &lt;220&gt; FEATURE:

280 &lt;221&gt; NAME/KEY: misc\_feature

281 &lt;222&gt; LOCATION: (60)..(60)

282 &lt;223&gt; OTHER INFORMATION: Xaa can be any naturally occurring amino acid

284 &lt;220&gt; FEATURE:

285 &lt;221&gt; NAME/KEY: misc\_feature

286 &lt;222&gt; LOCATION: (65)..(65)

287 &lt;223&gt; OTHER INFORMATION: Xaa can be any naturally occurring amino acid

289 &lt;400&gt; SEQUENCE: 13

```

291 Pro Pro Glu Glu Pro Gln Leu Ser Cys Phe Arg Lys Ser Pro Leu Ser
292 1          5          10          15

```

```

295 Asn Val Val Cys Glu Trp Gly Pro Arg Ser Thr Pro Ser Leu Thr Thr
296          20          25          30

```

```

299 Lys Ala Val Leu Leu Val Arg Lys Phe Gln Asn Ser Pro Ala Glu Asp
300          35          40          45

```

W--&gt; 303 Phe Gln Glu Pro Cys Gln Tyr Ser Gln Glu Ser Xaa Lys Phe Ser Cys

```

304          50          55          60
307 Xaa Leu Ala Val Pro Glu Gly Asp Ser Ser Phe Tyr Ile Val Ser Met
308 65          70          75          80

```

```

311 Cys Val Ala Ser Ser Val Gly Ser Lys Phe Ser Lys Thr Gln Thr Phe
312          85          90          95

```

```

315 Gln Gly Cys Gly Ile Leu Gln Pro Asp Pro Pro Ala Asn Ile Thr Val
316          100          105          110

```

319 &lt;210&gt; SEQ ID NO: 14

## RAW SEQUENCE LISTING

DATE: 01/28/2004

PATENT APPLICATION: US/09/202,104B

TIME: 13:44:21

Input Set : A:\sequence listv2.ST25.txt

Output Set: N:\CRF4\01282004\I202104B.raw

```

320 <211> LENGTH: 108
321 <212> TYPE: PRT
322 <213> ORGANISM: Artificial Sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: eceptor beta-chain of IL-6
327 <400> SEQUENCE: 14
329 Pro Pro Glu Lys Pro Lys Asn Leu Ser Cys Ile Val Asn Glu Gly Lys
330 1 5 10 15
333 Lys Met Arg Cys Glu Trp Asp Gly Gly Arg Glu Thr His Leu Glu Thr
334 20 25 30
337 Asn Phe Thr Leu Lys Ser Glu Trp Ala Thr His Lys Phe Ala Asp Cys
338 35 40 45
341 Lys Ala Lys Arg Asp Thr Pro Thr Ser Cys Thr Val Asp Tyr Ser Thr
342 50 55 60
345 Val Tyr Phe Val Asn Ile Glu Val Trp Val Glu Ala Glu Asn Ala Leu
346 65 70 75 80
349 Gly Lys Val Thr Ser Asp His Ile Asn Phe Asp Pro Val Tyr Lys Val
350 85 90 95
353 Lys Pro Asn Pro Pro His Asn Leu Ser Val Ile Asn
354 100 105
357 <210> SEQ ID NO: 15
358 <211> LENGTH: 7
359 <212> TYPE: PRT
360 <213> ORGANISM: Artificial Sequence
362 <220> FEATURE:
363 <223> OTHER INFORMATION: region in IL-6
365 <400> SEQUENCE: 15
367 Ser Leu Thr Thr Lys Ala Val
368 1 5
371 <210> SEQ ID NO: 16
372 <211> LENGTH: 12
373 <212> TYPE: PRT
374 <213> ORGANISM: Artificial Sequence
376 <220> FEATURE:
377 <223> OTHER INFORMATION: region in IL-6
379 <400> SEQUENCE: 16
381 Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser
382 1 5 10
385 <210> SEQ ID NO: 17
386 <211> LENGTH: 15
387 <212> TYPE: PRT
388 <213> ORGANISM: Artificial Sequence
390 <220> FEATURE:
391 <223> OTHER INFORMATION: region in IL-6
393 <400> SEQUENCE: 17
395 Trp Val Glu Ala Glu Asn Ala Leu Gly Lys Val Thr Ser Asp His
396 1 5 10 15
399 <210> SEQ ID NO: 18
400 <211> LENGTH: 5

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/202,104B

DATE: 01/28/2004  
TIME: 13:44:22

Input Set : A:\sequence listv2.ST25.txt  
Output Set: N:\CRF4\01282004\I202104B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; Xaa Pos. 60,65 ✓

**VERIFICATION SUMMARY**

DATE: 01/28/2004

PATENT APPLICATION: US/09/202,104B

TIME: 13:44:22

Input Set : A:\sequence listv2.ST25.txt

Output Set: N:\CRF4\01282004\I202104B.raw

L:275 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13  
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:48  
M:341 Repeated in SeqNo=13